

AMENDMENTS TO THE DRAWINGS

Fig. 3 has been amended to include the legend --Prior Art-- since a conventional GaN-type compound semiconductor device is depicted.

Attachment: Annotated Sheet
Replacement Sheet

REMARKS

Claims 1-32 are all the claims pending in the application. Claim 20 has been amended for purposes of further clarity. Claim 27 has been amended to correct its dependency.

The specification has been amended by inserting "of Fig. 3 using the apparatus of Figs. 1 and 2" after "device" in line 15, page 3 of the present specification.

Entry of the above amendments is respectfully requested.

I. Preliminary Matters

Initially, the Examiner is respectfully requested to acknowledge Applicants' claim to domestic priority under 35 U.S.C. § 119 and confirm receipt of the verified English translation of the provisional application filed on April 12, 2004 in the present application.

II. Response to Obviousness-Type Double Patenting Rejection

Claims 7, 16, and 29-32 are rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-3 of U. S. Patent No. 6,719,842 B2.

Without conceding in the merits of the rejection and to advance prosecution, Applicants submit herewith a terminal disclaimer to disclaim the terminal part of any patent granted on this application which would extend beyond the expiration of the full statutory term of U.S. Patent 6,719,842. In addition, Applicants submit that the filing of a terminal disclaimer to obviate a rejection based on non-statutory double patenting is not an admission of the propriety of the rejection.

In view of the above, withdrawal of the non-statutory double patenting rejection is respectfully requested.

III. Objection to the Drawings

The Examiner objects to the drawings because Fig. 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated.

The background section of the application refers to Fig. 3 as showing an example of a conventional GaN-type compound semiconductor device. Therefore, Fig. 3 has been designated by the legend --Prior Art--.

The Examiner also asserts that there is no a buffer layer 2 in Fig. 1.

In the first full paragraph at page 7, the present specification discloses that an embodiment of the present invention is described by referring to an apparatus shown in Figs. 1 and 2 and by referring to a GaN-type compound semiconductor device shown in Fig. 3. Therefore, although the buffer layer 2 (and other layers not shown in Fig. 1) is not shown in Fig. 1 or 2, it is shown in Fig. 3. To clarify this point further, the specification has been amended on page 3, line 15, by inserting "of Fig. 3 using the apparatus of Figs. 1 and 2" after "device".

In view of the above, it is respectfully submitted that the objections have been overcome, and withdrawal of the objections is respectfully requested.

IV. Response to Rejection of Claims

Claims 20 and 32 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not entirely clear why the Examiner is rejecting claims 20 and 32. However, since claim 20 does not recite any positive steps, claim 20 has been amended to recite the steps of

"charging ammonia" and "forming a GaN-based compound layer." As to claim 32, Applicants submit that this claim is clear, and request that the Examiner specifically identify any issue he still considers to remain if he wishes to maintain his position.

In addition, claims 1, 3, 5, 7, 8, 10, 13, 16, 17, 18, 19, 21, 24, 26, and 29 are rejected because "the liquid phase ammonia has a water concentration of 0.01 to 0.5 vol. ppm" is not described/supported in the specification.

The rejection is respectfully traversed.

At page 7, lines 15-21, the present specification discloses:

... the liquid phase ammonia has a water concentration determined by a Fourier-transform infrared spectroscopy (FT-IR) of 0.5 vol ppm or less. The liquid phase ammonia preferably has a water concentration of 0.4 vol ppm or less, more preferably 0.2 vol ppm or less.

Further, the Examples of the present specification use a water concentration of 1.0 to 0.01 vol ppm as set forth in Table 1 at page 17. The present range is based on the combination of the disclosure at page 7, lines 15-18 taken with Test Example 7 on page 17. Therefore, the limitation "the liquid phase ammonia has a water concentration of 0.01 to 0.5 vol ppm" is supported in the specification.

In view of the above, withdrawal of the rejections is respectfully requested.

V. Conclusion

For the foregoing reasons, reconsideration and allowance of claims 1-32 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 10/821,944

Attorney Docket Q81061

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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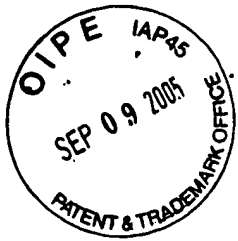
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Date: September 9, 2005



-- Prior Art --

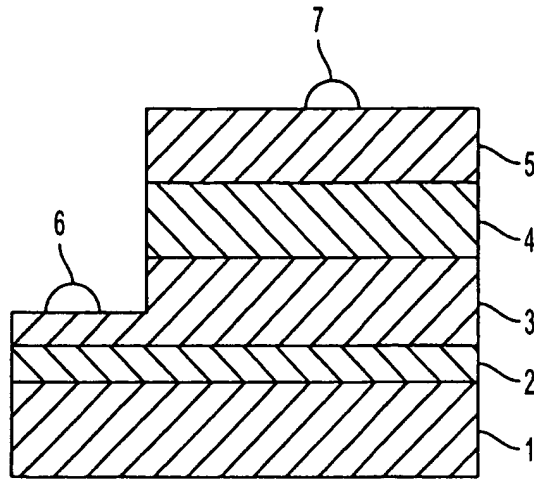


FIG. 3

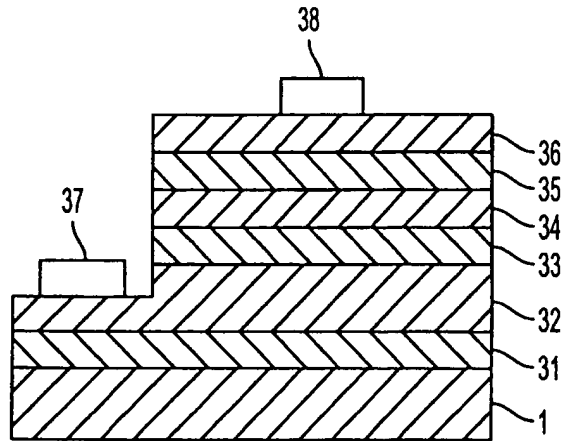


FIG. 4